



TECHNICAL DIRECTION DOCUMENT AMENDMENT

TDD Number: **02-96-04-0003-B**
START CONTRACT #: 68-W5-0019

Activity Type: IV.A.0 Removal Assessments Task: RA General Task Description: Air Sampling Completion Date: 10/15/96		Created On: 06/03/96 Original Created: 04/05/96 DPO/PO: Keith Kollar Task Monitor: Nick Magripiles Task Codes: 03; E; RS	
<p align="center"><u>SITE INFORMATION</u></p> Site/Project Name: Cornell-Dubilier Electronics Site County Name: City, State, Zip: South Plainfield , NJ SSID #: GZ CERCLIS #:		<u>Estimated Cost :</u> \$31,650.00 <u>Estimated Hrs:</u> 500 Dedicated: 500 Non-Dedicated: 0	
Deliverable: .N/A Funds Source: CERCLA Removal (3) DCN #(s): DBO012 (AAZ) Removal Support \$31,650.00		Priority: High Reference: Yes - Attached	
TDD Expenditure Limit: Cost: \$44,310.00 Hours: 700 Dedicated Hours: 700 Non-Dedicated Hours: 0		Staffing: Dedicated Staff Verbal Date: N / A	

Specific Element(s):

- Compile & Review Background Data
- Conduct Air Monitoring
- Collect Multimedia Samples
- Document On-Site Activities
- Document Release
- Maintain Site Log Book
- Prepare Safety Plan
- Prepare Sampling Plan
- Prepare Site Sketch/Map
- Prepare Trip Report
- Provide Photo Documentation
- Procure Laboratory Services
- Provide Waste Assessment on Drums (HAZCAT)
- Research & Recommend Analytical Analysis & Methods
- Review Validation of Analytical Laboratory Results
- Review Site Records/Technical Documents
- Meet with Task Monitor
- Provide Weekly Summary of Cost Expenditures

Comments:

The TDD is amended to expand the SOW to include an expanded sampling event (see attachment). The contractor shall provide technical support to the EPA Task Monitor for an ongoing site investigation.

SITE BACKGROUND

Cornell Dubilier Electronics Site - The Cornell-Dubilier Electronics (CDE) site is located in South Plainfield, NJ, in what is now known as Hamilton Industrial Park. CDE operated at this location from 1956 to 1961 testing transformer oils. It is alleged that during CDE's period of operation the company dumped transformer oil contaminated with PCBs directly on site soils. Former employees have reportedly claimed that transformers were buried behind the facility during the same time period. Currently, approximately fifteen businesses operate in a portion of the buildings formerly occupied by CDE. The property is approximately 25 acres in size. The buildings appear to occupy the front 50% of the property. The remaining rear portion is comprised of an unused field and wetlands. This portion of the property abuts an unnamed tributary to Bound Brook. Businesses and residential homes abut the property to the north and west, a Conrail line runs on the eastern boundary, and a wetland to the south. Sampling was conducted under the Pre-remedial program in June, 1994. Of six soil samples collected from a depth of 0-1 ft, one has revealed maximum levels of PCBs (1,100 ppm), lead (2,200 ppm) and cadmium (37 ppm). The area where this sample was collected is currently used by a truck driving school and is enclosed by a fence. The trucks practice and raise significant amounts of dust, while other view the activities from the outside of a nearby office trailer. These trucks and other cars also drive out of this fenced area along a dirt/hardpack gravel road that winds through the industrial park and leads onto Hamilton Boulevard, a residential/business area. PCBs were also found at 68 ppm and 110 ppm. Mercury, silver, and chromium were detected at maximum levels of 2.9 ppm, 26.7 ppm, and 78.6 ppm, respectively. A sample collected from a pile of excavated soil from a past heating oil release was found to contain the PCBs at 68 ppm. These piles are still present on the site. Samples collected from the nearby stream sediments revealed PCBs at 550 ppm in one of four samples. PCBs were detected in all of the sediment samples. Three soil samples collected by the NJDEP in September, 1994 revealed somewhat similar results for lead and PCBs. Cadmium (55.3 ppm), chromium (242 ppm), copper (1,600 ppm), arsenic (30.5 ppm), nickel (589 ppm), and zinc (1800 ppm) were also detected. The inorganic data was never validated.

The site is completely accessible at all times. On weekends, there are no restrictions to prevent access. Solid waste dumping is somewhat prevalent and graffiti covers some of the structures. A foot path is evident which cuts through the field where it is suspected that filling/dumping took place in the past. Electrical components and other residual materials are evident in this field. The foot path runs west to east from the residential area on Spicer Avenue to the brook. Spicer Avenue is less than 500 feet from the known area of concern, however probably less than 300 feet from the edge of the property. Dirt bike riding is reported to occur at the site.

Standard Language:

A. TDD Created By:

- Signed by Lisa Guarneiri on 06/03/96 12:49:31 PM, according to EPA Admin. Systems Division



Lisa Guarneiri

06/03/96

Signed On:

B. Reviewed and Approved By:

- Signed by Lisa Guarneiri on 06/03/96 12:49:30 PM, according to EPA Admin. Systems Division

Project Officer:



Lisa Guarneiri

04/04/96

Signed On:

Contract Officer:

Signed On:

C. Approval Comments:

Cornell Dubilier Electronics Site - The Cornell-Dubilier Electronics (CDE) site is located in South Plainfield, NJ, in what is now known as Hamilton Industrial Park. CDE operated at this location from 1956 to 1961 testing transformer oils. It is alleged that during CDE's period of operation the company dumped transformer oil contaminated with PCBs directly on site soils. Former employees have reportedly claimed that transformers were buried behind the facility during the same time period. Currently, approximately fifteen businesses operate in a portion of the buildings formerly occupied by CDE. The property is approximately 25 acres in size. The buildings appear to occupy the front 50% of the property. The remaining rear portion is comprised of an unused field and wetlands. This portion of the property abuts an unnamed tributary to Bound Brook. Businesses and residential homes abut the property to the north and west, a Conrail line runs on the eastern boundary, and a wetland to the south. Sampling was conducted under the Pre-remedial program in June, 1994. Of six soil samples collected from a depth of 0-1 ft, one has revealed maximum levels of PCBs (1,100 ppm), lead (2,200 ppm) and cadmium (37 ppm). The area where this sample was collected is currently used by a truck driving school and is enclosed by a fence. The trucks practice and raise significant amounts of dust, while other view the activities from the outside of a nearby office trailer. These trucks and other cars also drive out of this fenced area along a dirt/hardpack gravel road that winds through the industrial park and leads onto Hamilton Boulevard, a residential/business area. PCBs were also found at 68 ppm and 110 ppm. Mercury, silver, and chromium were detected at maximum levels of 2.9 ppm, 26.7 ppm, and 78.6 ppm, respectively. A sample collected from a pile of excavated soil from a past heating oil release was found to contain the PCBs at 68 ppm. These piles are still present on the site. Samples collected from the nearby stream sediments revealed PCBs at 550 ppm in one of four samples. PCBs were detected in all of the sediment samples. Three soil samples collected by the NJDEP in September, 1994 revealed somewhat similar results for lead and PCBs. Cadmium (55.3 ppm), chromium (242 ppm), copper (1,600 ppm), arsenic (30.5 ppm), nickel (589 ppm), and zinc (1800 ppm) were also detected. The inorganic data was never validated.

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L. A. Guarneiri

Lisa Guarneiri

06/03/96

Signed On:

B. Reviewed and Approved By:

- Signed by Lisa Guarneiri on 06/03/96 12:49:30 PM, according to EPA Admin. Systems Division

Project Officer:

L. A. Guarneiri

Lisa Guarneiri

04/04/96

Signed On:

Contract Officer:

Signed On:

C. Approval Comments:

START assigned:

PM - Campbell

QC - Butterfield

Accepted 3 Jun 1996

C. Kelley

Cornell-Dubilier Electronics Site
Amended TDD Requirements (6/3/96)

This TDD is meant to expand on the soil/sediment sampling previously completed for the SI by the Pre-Remedial contractor (Malcolm-Pirnie). The purpose of this sampling event is to identify additional locations of contamination at the site in order to assist with the determination of CERCLA removal action eligibility. Sampling is required to commence no later than June 25, 1996.

The soil samples will consist of surface and subsurface grabs, and test pits. A limited number of sediment samples will be collected as surface grabs.

Surface soil samples will be collected from the dirt/gravel roadway (approx. 12) that winds through the site and from the vacant field (approx. 13) behind the buildings. All surface soil samples should be taken from 0-3 inches in depth. These samples should be analyzed for PCBs, cadmium, chromium, mercury, lead, and silver. All metals analyses are for total metals. The sample locations will be biased. A maximum of 25 samples are expected to be collected.

The purpose of these surface samples is to determine if contamination is present at the surface, to assist in evaluating potential migration pathways and routes of exposure, and to assist ATSDR in evaluating any potential health threats. The gravel on the roadway was reportedly laid down in recent years so that the samples on the roadway could provide an indication of contaminant transport from wind or vehicular dispersion.

Subsurface samples will be divided into two groups. In the dirt/gravel roadway, samples will be collected from just below the "gravel" portion of the roadway. These samples will be from 0-1 foot below the "gravel". In the vacant field, the samples will be collected from 0-1 foot below the ground surface. The latter will actually be from 3-12 inches since there will also have been a surface sample previously collected. These samples should be analyzed for PCBs, cadmium, chromium, mercury, lead, and silver. The sample locations will be the same as the surface samples. A maximum of 25 samples are expected to be collected.

The purpose of these surface samples is to determine if contamination is present near the surface and below the "paved" portion of the dirt/gravel roadway.

Test pits will be excavated in the vacant field to a maximum depth of eight feet or to the water table, whichever is less. The locations will be biased and dependent on the results of the underground utility search. The number of test pits will be dependent on the findings during the test pit operations, however a maximum of seven test pits are expected to be excavated. A maximum of two samples will be collected from each test pit. The

~~OSC~~ **TM** will select the samples. These samples should be analyzed for PCBs, cadmium, chromium, mercury, lead, and silver. Two samples will be analyzed for VOAs, semi-VOAs, heavy metals, and a full TCLP scan.

Test pit operations should be conducted by person(s) with 40-hour training. A written contingency plan should be available in case electrical transformers and/or drums are discovered. The plan should outline the procedures that will be followed if a buried container is damaged or leaking during the excavation. Appropriate equipment to address a release, including overpacks and/or drums, should be available during the excavations.

Samples should be collected directly from the bucket to avoid a confined entry into the pits. An appropriate sampling technique should be used to avoid collecting sample in direct contact with the bucket. Excavated material should be stockpiled on visqueen in two foot intervals for photographing, logging, and subsequent reverse order placement into the pit from which it was excavated. Appropriate decontamination procedures should be followed to minimize crosscontamination of locations and sample points.

The potential exists for oil/liquid samples in the test pits. Arrangements should be made for a maximum of three such samples. These samples will be analyzed for VOAs, PCBs, cadmium, chromium, mercury, lead, and silver.

Sediment samples will be collected for total organic carbon (TOC) and grain size analyses. A maximum of two samples are expected to be collected. The purpose of these samples is to assist in determining potential impacts to the environment.

Soil/sediment from storm drains, if present, will be sampled. A maximum of four samples are expected. These samples should be analyzed for PCBs, cadmium, chromium, mercury, lead, and silver.

A **QA-Level 2** methodology is required for samples. Depending on the applicability of the soil matrix, the ~~OSC~~ **TM** will consider use of immunoassay kits for PCBs and XRF for metals. In this case, a fraction of the samples (10-20%) would be analyzed via fixed laboratory. Upon meeting with the OSC, START needs to determine whether these methods would be appropriate in this case and **TM** provide this information to the ~~OSC~~ **TM**. If applicable, the ~~OSC~~ **TM** will then provide START with the specific percentage of samples to be analyzed via fixed laboratory.

A **QA/QC sampling plan** and an appropriate **safety plan** to cover all aspects of the sampling event are required. A draft of each of these plans must be submitted to the ~~OSC~~ **TM** for his review no later than **June 18, 1996**. The sampling plan should contain a diagram of the site with the proposed sample locations. All corrections or adjustments to the plans must be completed and presented as a final document to the ~~OSC~~ **TM** at least two days before the commencement of the sampling event.

The START PM is required to **meet with the OSC** upon receipt of the TDD to discuss the scope of work. Two site visits are expected with the START PM prior to the sampling event. An initial visit to familiarize the PM and a subsequent visit, if necessary, to choose the sample locations. The **OSC** will select the sample locations.

An **underground utilities search** is required for the area behind the buildings prior to commencement of sampling activities. Records show several significant utility lines passing through this area. All lines must be marked and readily visible.

Documentation of site activities should include photos and detailed written notes containing unopinionated observations. The written notes should include detailed excavation logs for the test pits and include photographic substantiation for each test pit. The photographs should be sequentially logged for future use.

Provide for **air monitoring** in the test pits, including but not limited to OVA, HNU, and explosimeter.

Provide for **hazcat capabilities**, if required and necessary, during test pit activities. This is contingent on finding transformers with material or pools of oil.

Provide for **data validation** upon receipt of analytical data.

Provide for appropriate **disposal of waste** generated at the site during this investigation.

Detailed **CAD diagrams** (to scale) are required after completion of the sampling event depicting the sample locations and the analytical results. One diagram should provide sample points with no analytical results, a second should include sample points and numerical results, and a third should provide a visual depiction of the contamination.

A **trip report** is due one week after completion of sampling event. A **SIMS report** is required every week.